

REMARKS/ARGUMENTS

Claim Rejections § 112, Second Paragraph

Claims 8-12 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Office Action further stated that the phrase “stopping said optical disc pickup head at said position” in claim 8, line 11 is unclear and cannot be understood, because the position of the optical pickup is variable since the pickup is moved along on surface of the optical disc.

To expedite the prosecution, claim 8 is amended to clarify the scope of the claimed limitations without prejudice. The Specification, as presented originally, states that “...the initial position of the pickup head module, which is located in the part of the moving range nearby the spindle motor” (paragraph 4). The “position” in claim 8 has been amended to “initial position”. The 35 USC 112, second paragraph rejection hence is moot in view of the amendment.

Claim Rejections § 112, First Paragraph

Claims 8-12 and 15 were rejected under 35 USC 112 first paragraph, as failing to comply with the written description requirement. The Office Action dated June 22, 2007 stated that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (page 3, 2nd paragraph). The Office Action further stated that the original specification fails to specify that “stopping said optical disk pickup head during said first time duration if said optical disk pickup head hits a spindle motor during said first time duration...”. The Office Action further stated that these features are considered to be new matter. Applicant respectfully disagrees.

The Specification, as originally presented, does disclose stopping the pickup head with a gradually decreasing speed curve. As illustrated in figure 1, the sledge motor 30 moves pickup head 26 on the rack 27 towards the initial position nearby the spindle motor 22. Also illustrated

in the figures 2 and 3, the pickup head is moving towards the initial position at a first speed during a first time duration, a second speed during a second time duration, a third speed during a third time duration, and a forth speed during a forth time duration. In introducing the background and motivation, the Specification discloses that a touch sensor is omitted to reduce the production cost and the pickup head will collide with the spindle motor during the start-up as the result of it, such that the pickup head can be damaged due to collision with the spindle motor during the initial start up (paragraph 4, paragraph 7, paragraph 16, lines 10-12). The present invention is to resolve this problem of possible collision damage by moving the pickup head at a gradually decreasing speed. Thus, the Specification as originally presented does disclose the stopping the pickup head when the pickup head hits the sledge motor.

35 USC 102(b)

Claims 8, 10, 13, 14, and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by You et al. (U.S. Patent No. 5,764,602); claims 8, 10, 11, 13, 14, 16, and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sohmuta (U.S. Patent No. 5,623,461) and Ogino (U.S. Patent No. 5,428,590). The applicant respectfully disagrees for the reasons discussed below.

Patent Examiners Should Interpret Claims in Light of Specification

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation. The amended claimed limitation "initial position", as defined in the Specification, is located in the part of the move range nearby the spindle motor (paragraph 4) and contains a table of contents of the disk (paragraph 20, lines 1-2). The amended claimed step "turning power switch on" along with other steps, as defined in the Specification, is that the optical disk drive cannot ensure the position of the pickup head when the power is switched on, the sledge motor thus provides various speeds in moving the pickup head towards the initial position (paragraphs 17, and paragraph 21, figure 3).

35 USC 102(b) by You et al.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (MPEP § 2131). As can be gleaned from the cited case law, the requirement is that each element must be either expressly or inherently described. In examining the portion of the cited reference that the examiner has referred the applicant to, there is no description of stopping the pickup head when the pickup head hits the spindle motor; furthermore, the cited reference does not disclose or explicitly teach one the combination of the gradually decreasing the speed of the pickup head after switching the power on and stop the pickup head at the initial position when the pickup head hits the spindle motor.

You does not disclose stopping the pickup head when hitting spindle motor

The cited reference You discloses a seeking control method for a pickup head. The cited reference discloses that number of tracks between the initial position and target position is known (column 2, last line, figure 4, step 51). The cited reference controls and decrease the pickup head's speed in accordance of the number of reference clock based on the number of the counted tracks (column 3, line 1-5). The cited reference does not disclose stopping the pickup head when the pickup head hits the spindle motor, because the cited reference's pickup head will not hit the spindle motor. The Office Action stated that the pickup head cannot move further to inner area when it hits spindle motor (page 4, 5th paragraph). While this statement is logically true, it has no applicable meaning to the cited reference because the cited reference's pickup head will not hit the spindle motor. The cited reference discloses that a distance/number of tracks is known (figure 4, step 51) before moving the pickup head (figure 4, steps 52-57). The cited reference identify the pickup head's current location by counting the number of tracks and reference clock; thus, the cite reference does not rely on spindle motor to stop the pickup head.

You does not disclose moving pickup head with gradually decreasing speed after switching the power on

The cited reference discloses seeking a target position with pre-screened tracking information. The cited reference, unlike the present invention, knows the pickup head's current position of the pickup head and the exactly distance between the pickup head's current position and target position (as illustrated in figure 4, step 51). The cited reference discloses a seeking control method for a regular seeking process after the disk has been pre-screened. The amended claim limitation "turning power switch on" along with rest of limitations, as defined in the Specification, is that the optical disk drive cannot ensure the position of the pickup head when the power is first switched on; therefore, the pickup head is moving at gradually decreasing speed to the initial position.

You does not disclose the initial position as claimed

The cited reference discloses moving the pickup head from the initial position to the target position. The claimed limitation "initial position", as defined in the Specification, is located in the part of the move range nearby the spindle motor (paragraph 4) and contains a table

of contents of the disk (paragraph 20, lines 1-2). The claimed “initial position” is one particular location (most inner track) that is located nearby the spindle motor and contains the table of contents. The cited reference does not disclose the claimed “initial position” and moving to the initial position as claimed. The cited reference’s initial position is the pickup head’s current position, rather than the “initial position” as claimed.

35 USC 102(b) by Sohmuta

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (MPEP § 2131). As can be gleaned from the cited case law, the requirement is that each element must be either expressly or inherently described. In examining the portion of the cited reference that the examiner has referred the applicant to, there is no description of stopping the pickup head when the pickup head hits the spindle motor; furthermore, the cited reference does not disclose or explicitly teach one the combination of the gradually decreasing the speed of the pickup head after switching the power on and stop the pickup head at the initial position when the pickup head hits the spindle motor.

Sohmuta does not disclose stopping the pickup head when hitting spindle motor

The cited reference discloses a seeking control method for a pickup head. The cited reference discloses that the movement of the pickup head is finished by calculating the track number (column 6, lines 52-53, column 2, 2nd paragraph, column 4, lines 53-63). The cited reference controls and decrease the pickup head’s speed with a rough actuator and a fine actuator based on a threshold of the remaining number of tracks (figure 5, step S24, column 4m last paragraph, column 5, 1st paragraph). The cited reference does not disclose stopping the pickup head when the pickup head hits the spindle motor, because the cited reference’s pickup head will not hit the spindle motor. The Office Action stated that the pickup head cannot move further to inner area when it hits spindle motor (page 5, last paragraph). While this statement is logically true, it has no applicable meaning to the cited reference because the cited reference’s pickup head will not hit the spindle motor. The cited reference discloses that a distance/number of tracks is known (figure 5, step S19) before moving the pickup head (figure 5, steps S20-27). The

cited reference identify the pickup head's current location by counting the number of tracks; thus, the cite reference does not rely on spindle motor to stop the pickup head.

Sohmuta does not disclose moving pickup head with gradually decreasing speed after switching the power on

The cited reference discloses seeking a target position with pre-screened tracking information. The cited reference, unlike the present invention, knows the pickup head's current position of the pickup head and the exactly distance between the pickup head's current position and target position (as illustrated in figure 5, step 19). The cited reference discloses a seeking control method for a regular seeking process after the disk has been pre-screened. The amended claim limitation "turning power switch on" along with rest of limitations, as defined in the Specification, is that the optical disk drive cannot ensure the position of the pickup head when the power is first switched on; therefore, the pickup head is moving at gradually decreasing speed to the initial position.

Sohmuta does not disclose the initial position as claimed

The cited reference discloses moving the pickup head from the initial position to the target position. The claimed limitation "initial position", as defined in the Specification, is located in the part of the move range nearby the spindle motor (paragraph 4) and contains a table of contents of the disk (paragraph 20, lines 1-2). The claimed "initial position" is one particular location (most inner track) that is located nearby the spindle motor and contains the table of contents. The cited reference does not disclose the initial position and moving to the initial position as claimed. The cited reference only discloses moving the pickup head to a target position with known distance, rather than the "initial position" with unknown distance as claimed.

35 USC 102(b) by Ogino

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (MPEP § 2131). As can be gleaned from the cited case law, the requirement is that each element must be either expressly or inherently

described. In examining the portion of the cited reference that the examiner has referred the applicant to, there is no description of stopping the pickup head when the pickup head hits the spindle motor; furthermore, the cited reference does not disclose or explicitly teach one the combination of the gradually decreasing the speed of the pickup head after switching the power on and stop the pickup head at the initial position when the pickup head hits the spindle motor.

Ogino does not disclose stopping the pickup head when hitting spindle motor

The cited reference discloses a velocity control method for a recording apparatus. The cited reference discloses the delay between the currently intended velocity and the current velocity (column 2, 2nd paragraph). The cited reference thus discloses a method for synchronizing the velocity detection with the velocity control and seeking operation of the head (column 2, lines 30-35). The cited reference discloses that the movement of the pickup head is finished by calculating the number of tracks to be jumped (figure 5, step S31). The cited reference discloses the distance of the target location is known. The cited reference does not disclose stopping the pickup head when the pickup head hits the spindle motor, because the cited reference's pickup head will not hit the spindle motor. The Office Action stated that the pickup head cannot move further to inner area when it hits spindle motor (page 7, 5th paragraph). While this statement is logically true, it has no applicable meaning to the cited reference because the cited reference's pickup head will not hit the spindle motor. The cited reference discloses that a distance/number of tracks is known before moving the pickup head; thus, the cited reference does not rely on spindle motor to stop the pickup head.

Ogino does not disclose moving pickup head with gradually decreasing speed after switching the power on

The cited reference discloses that the distance to the target position is known, thus the cited reference inherently discloses seeking a target position with pre-screened tracking information. The cited reference, unlike the present invention, knows the pickup head's current position of the pickup head and the exactly distance between the pickup head's current position and target position (as illustrated in figure 5, step S31). The cited reference discloses a seeking control method for a regular seeking process after the disk has been pre-screened. The amended claim limitation "turning power switch on" along with rest of limitations, as defined in the

Specification, is that the optical disk drive cannot ensure the position of the pickup head when the power is first switched on; therefore, the pickup head is moving at gradually decreasing speed to the initial position.

Ogino does not disclose the initial position as claimed

The cited reference discloses moving the pickup head from the pickup head's current position to a target position. The claimed limitation "initial position", as defined in the Specification, is located in the part of the move range nearby the spindle motor (paragraph 4) and contains a table of contents of the disk (paragraph 20, lines 1-2). The claimed "initial position" is one particular location (most inner track) that is located nearby the spindle motor and contains the table of contents. The cited reference does not disclose the initial position and moving to the initial position as claimed. The cited reference only discloses moving the pickup head to a target position with known distance, rather than the "initial position" with unknown distance as claimed.

35 USC 103(a)

Claims 9, 12, 14, and 17 were rejected under 35 U.S.C. § 103(a) as being obvious over You, Sohmuta, or Ogino. The applicant respectfully disagrees for the reasons discussed above that none of the cited references discloses every claimed limitations stated in the independent claims. Furthermore, these claims are rejected under 35 U.S.C. § 103(a) with one single reference; the Office Action states that the cited references are “capable” of moving the optical pickup head to any position, the Office Action then concludes that “obviously” a person with ordinary skill in the art will adapt cited references to move pickup head to the claimed initial position.

Office has the Burden of Proof

The applicant doesn't have the initial burden of proving non-obviousness. The Office has the initial burden of setting forth a prima facie case of obviousness, and to do that the Office must identify **specific** teachings, suggestions or motivations in the prior art for making the claimed combination. In the 35 U.S.C. § 103(a) rejection, the Office Action is using an Official Notice in combining with the reference. It is insufficient to merely state that combination of the missing elements is obvious in lack of teaching, suggestions, and motivations. The cited references do not disclose or teach stopping the pickup head when the pickup head hits the spindle motor; furthermore, the cited reference does not disclose or explicitly teach one the combination of the gradually decreasing the speed of the pickup head after switching the power on and stop the pickup head at the initial position when the pickup head hits the spindle motor.

Conclusion

Claims 8 and 11 are amended and pending in this application; claims 9, 10, and 12-18 are cancelled without prejudice. The Applicant requests a favorable consideration and allowance in view of the amendment and arguments above.

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